

Practical Implementation of Precision Viticulture

TAYLORS WINES – CLARE VALLEY

COLIN HINZE
Vineyard Manager
colin.hinze@taylorswines.com.au

HISTORY OF ADOPTION

2004 – EM38

- Management of High Risk Zones for Imported Water
- Vineyard Redevelopment

2006 – Plant Cell Density

- Vigour Mapping to identify vine variability

2006 – Grape Yield Mapping

- One of two harvesters initially
- Second harvester following season

CHALLENGES

- Time and Focus
- Split harvest opportunities limited
- Hardware capabilities
- Software minefield



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SUCSESSES

- Split Picking



4




CLARE VALLEY SHIRAZ

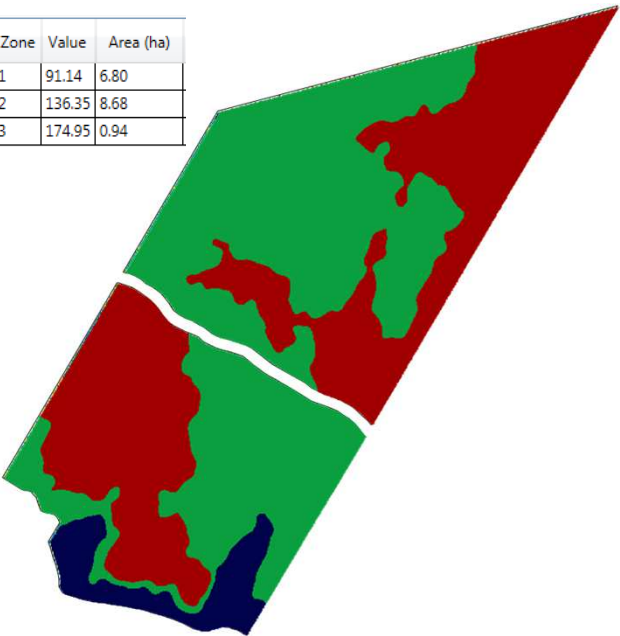


➤A – 5%

➤B – 10%

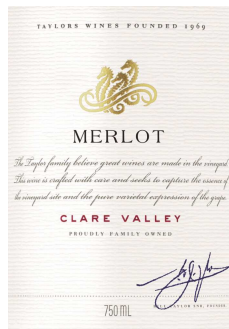
➤C – 85%

	Zone	Value	Area (ha)
	1	91.14	6.80
	2	136.35	8.68
	3	174.95	0.94

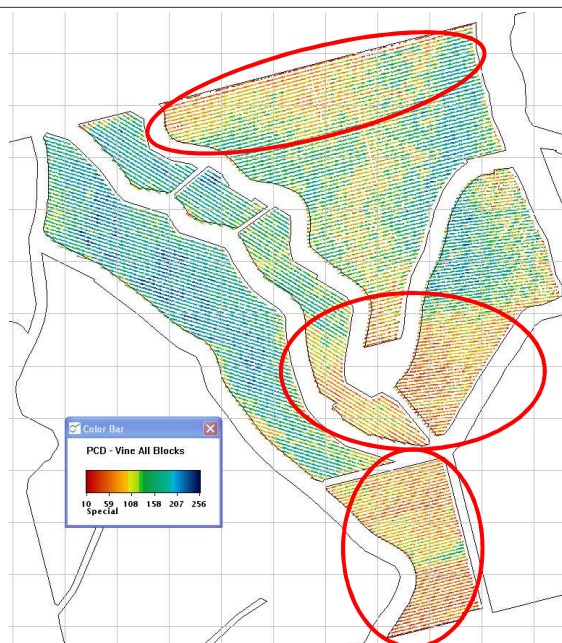


CLARE VALLEY MERLOT

- A –
- B –
- C – 100%



7



8

SUCSESSES

- Split Picking
- R&D, Internal Trials

Straw

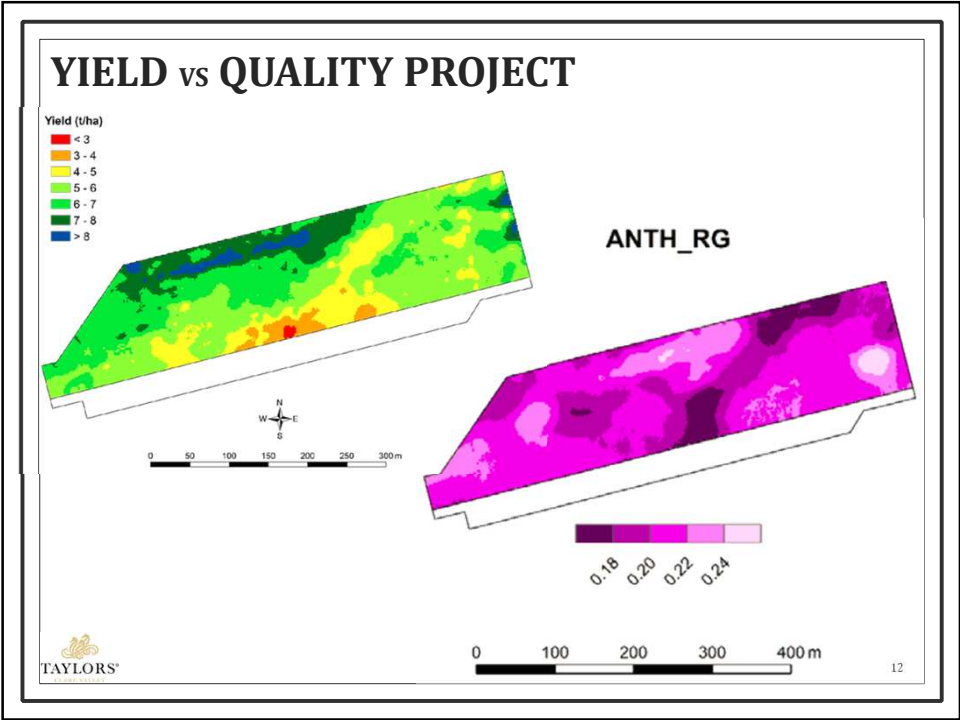
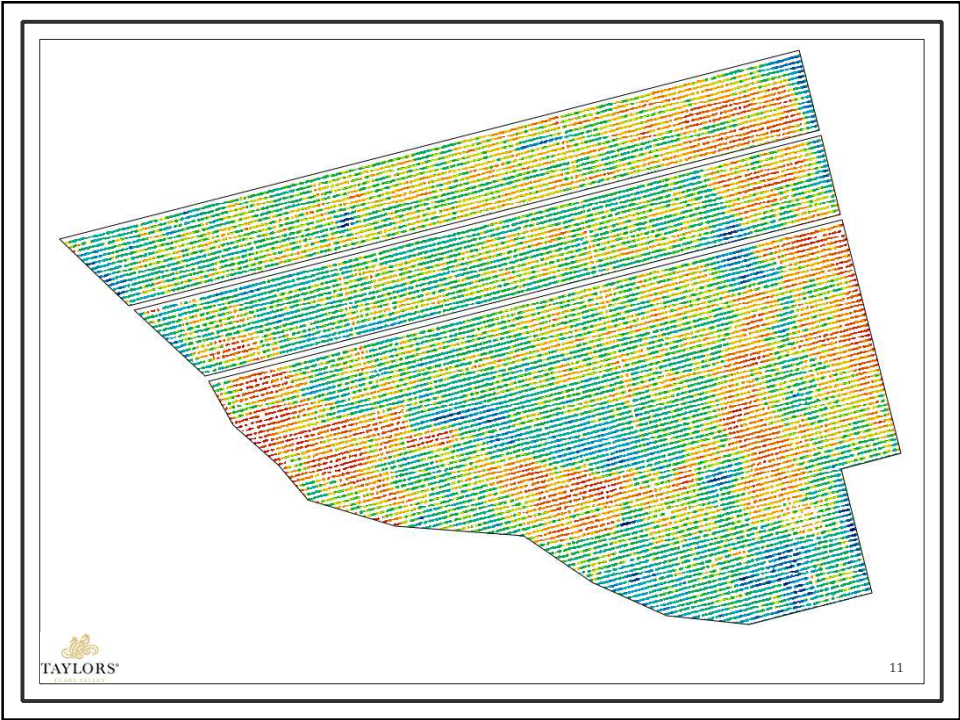


Mulch



Traditional





SUCSESSES

- Split Picking
- R&D, Internal Trials
- Block Troubleshooting



Pit #	Row #	Vine # (from East)	Comment
1	161	39	
2	161	80	
3	161	120	
4	161	160	
5	161	200	
6	161	240	
7	175	30	control
8	177	30	straw
9	179	30	duramulch
10	175	210	control
11	177	210	straw
12	179	210	duramulch
13	176	100	
14	176	170	
15	192	37	
16	192	76	
17	192	150	
18	192	219	
19	202	12	
20	202	50	
21	202	120	
22	202	170	
23	202	200	
24	212	30	
25	212	85	
26	212	140	
27	212	196	
28	224	20	
29	224	70	
30	224	120	
31	224	165	
32	237	30	
33	237	90	
34	250	50	



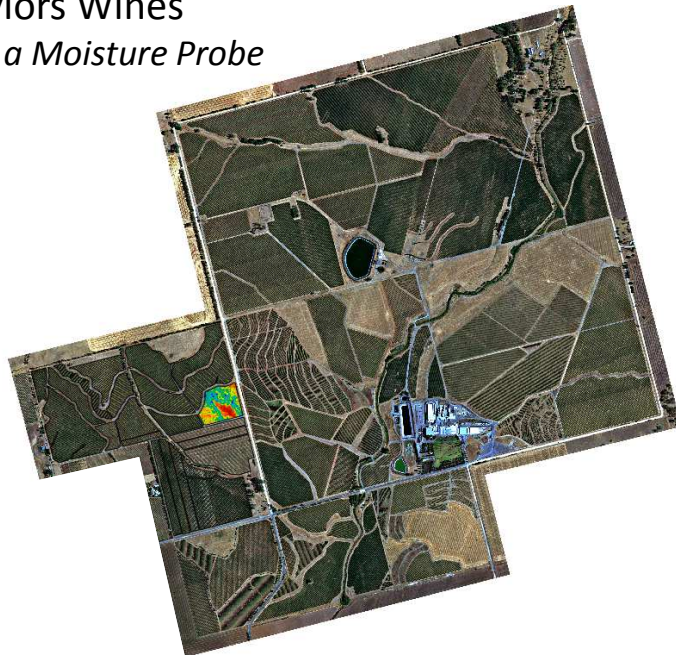
SUCSESSES

- Split Picking
- R&D, Internal Trials
- Block Troubleshooting
- Moisture Probe Locations



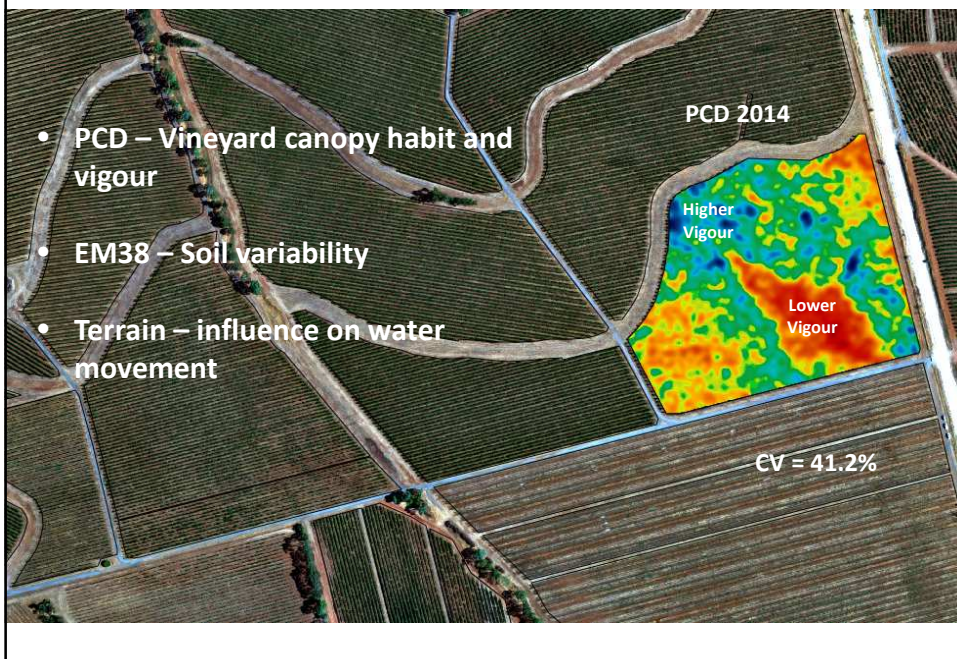
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Taylors Wines
Locating a Moisture Probe

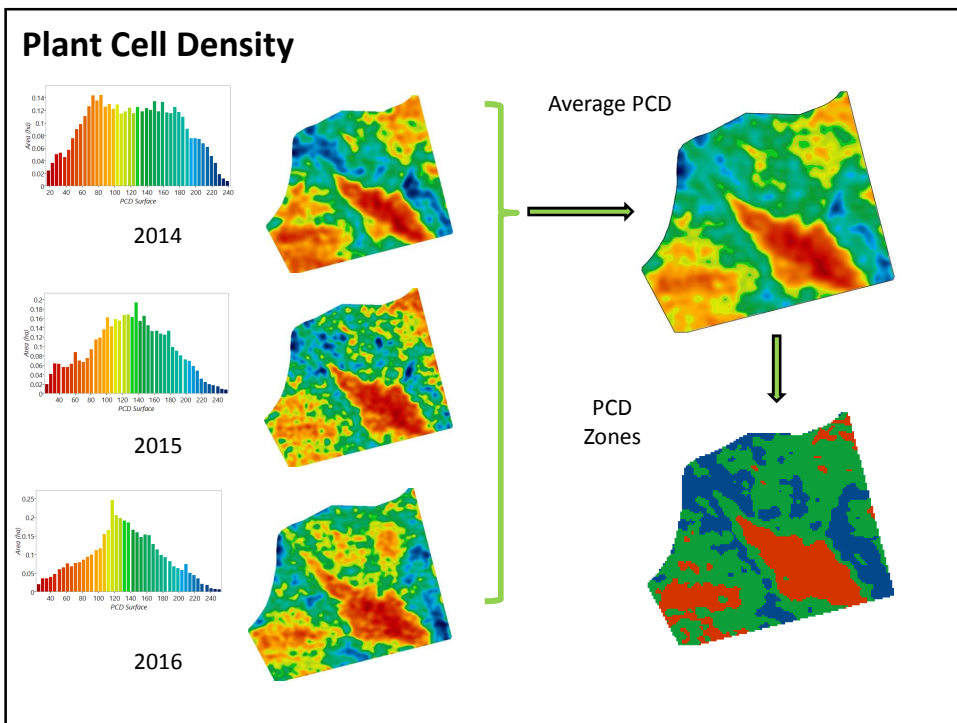


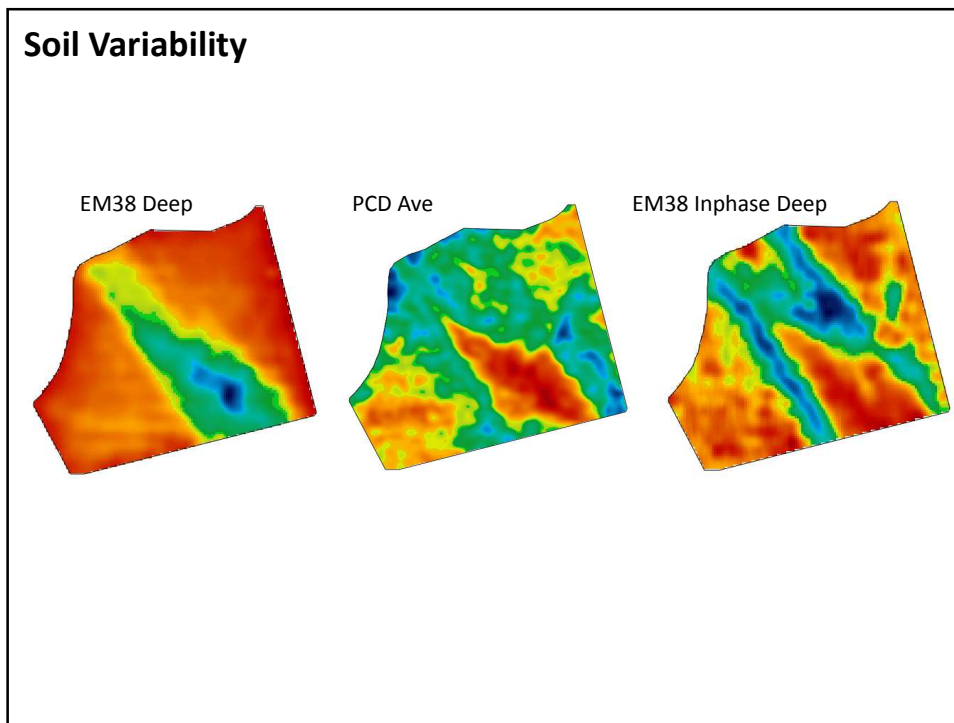
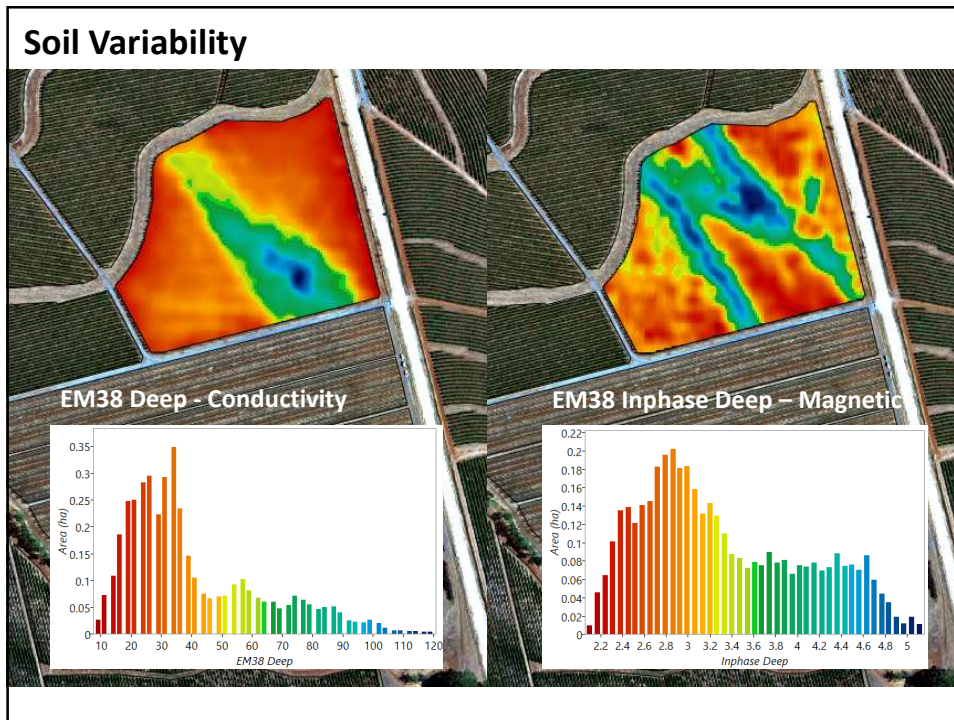
Data Elements

- PCD – Vineyard canopy habit and vigour
- EM38 – Soil variability
- Terrain – influence on water movement

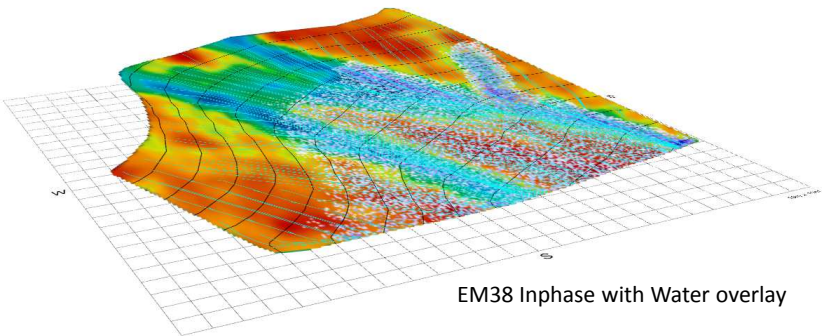


Plant Cell Density

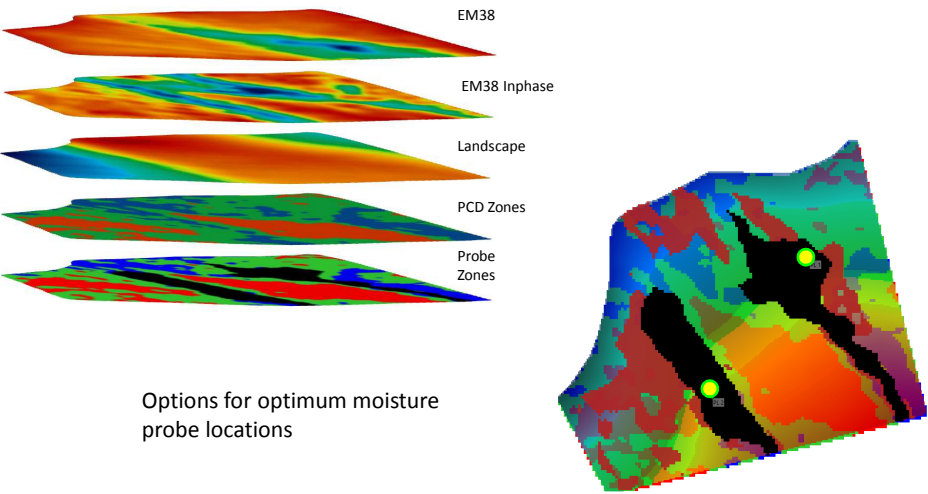


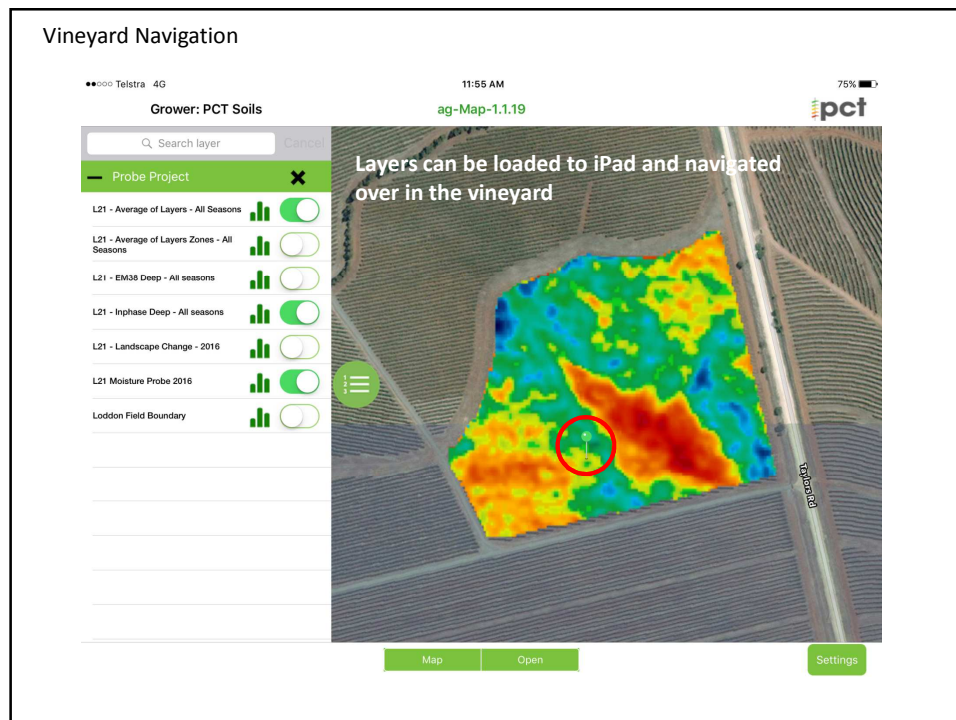


Terrain



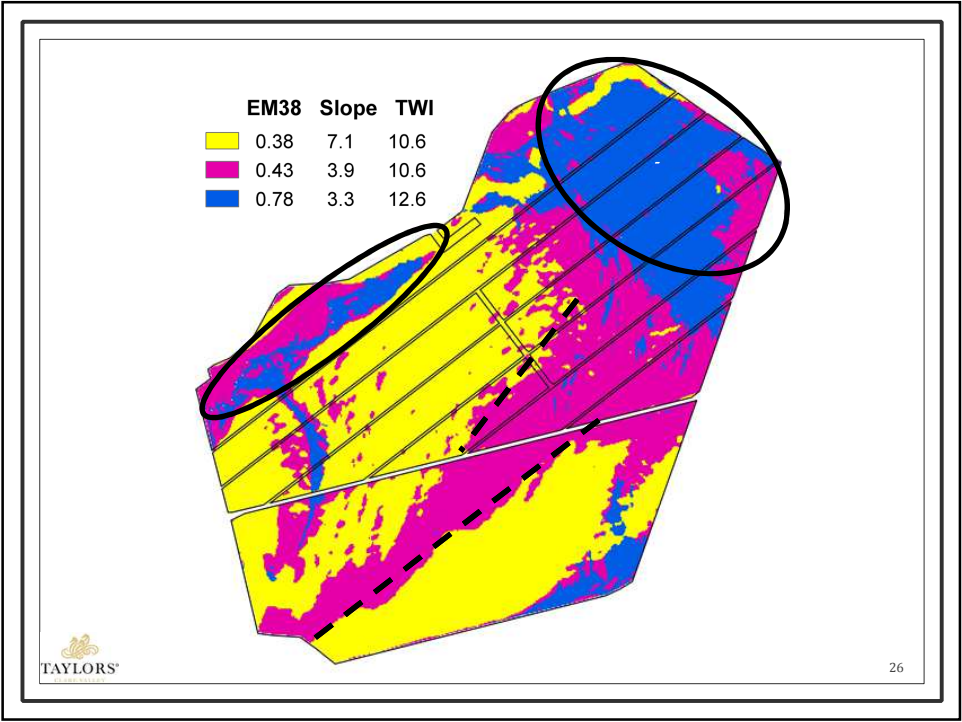
Information Analysis

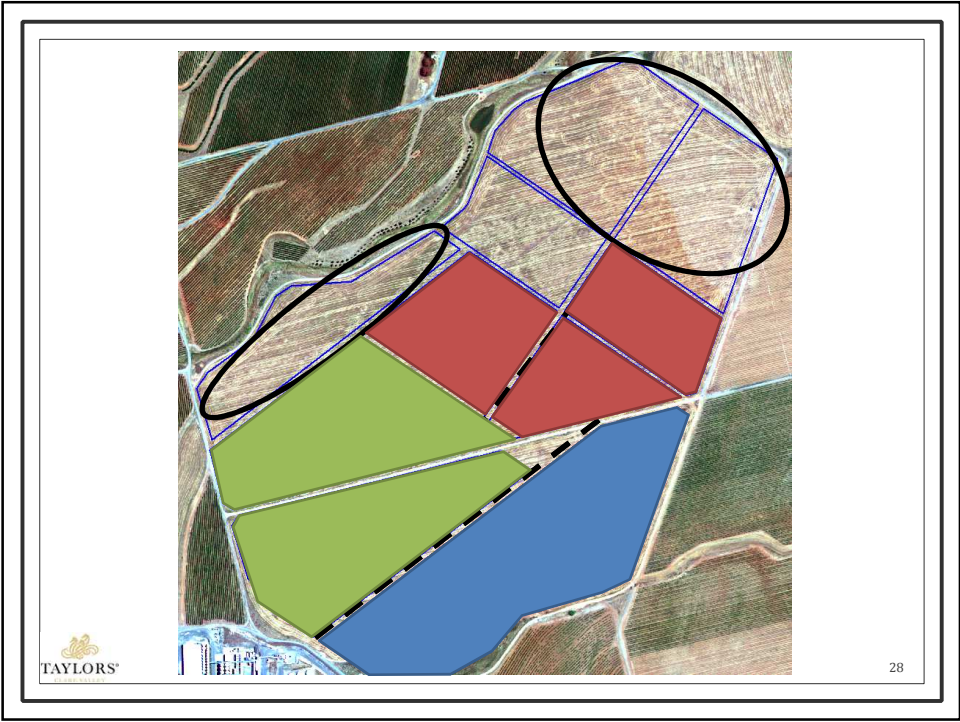
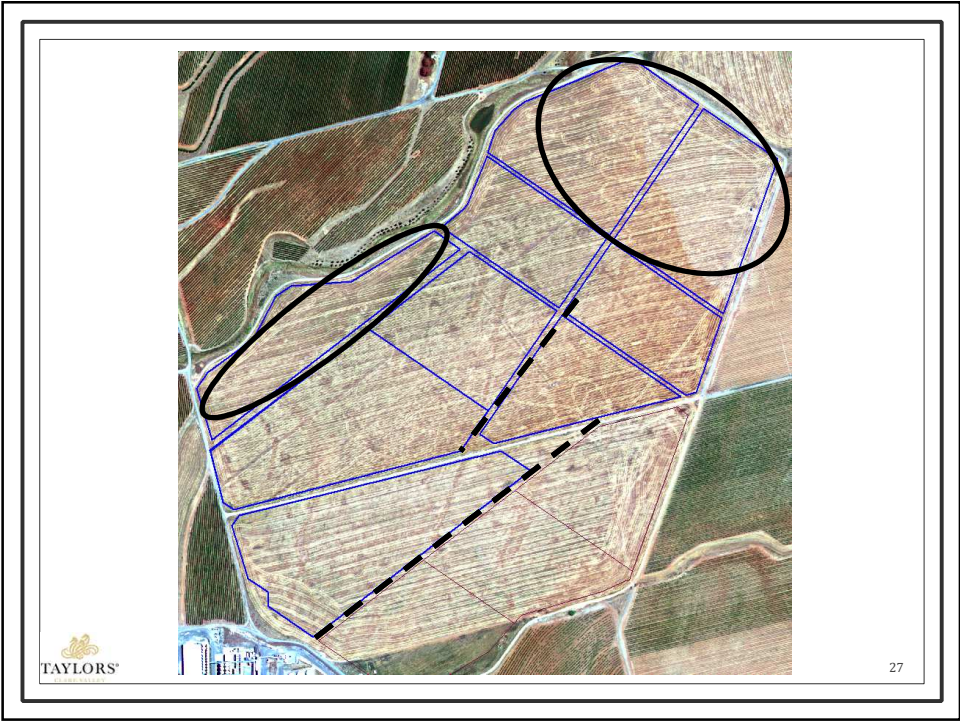




SUCSESSES

- Split Picking
- R&D, Internal Trials
- Block Troubleshooting
- Moisture Probe Locations
- Vineyard Redevelopment







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